



ESTOS UCServer Axxium Plugin



Dialog Plug-In DLL

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Requirements

Hardware/Software

ESTOS UCServer Version 3.0.0.921
or higher
enetivr3.dll

Information

ESTOS UCServer is a CTI Server Software

The enetivr3.dll must be located in the same directory as the
UCServerPlugin.dll

Version

| Version | Information | Tested with ... |
|----------|---|-----------------|
| V4.0.0.2 | Added SetCallDataEx | |
| V4.0.0.1 | Added SetCallData / Updated for UCServer V4 | |
| V3.0.0.3 | New Inforface for CtiServer V3 | Axxium V5.0 |
| V1.0.0.3 | Added SnapShotDeviceEx | Axxium V5.0 |
| V1.0.0.2 | Added SnapShotDevice | Axxium V5.0 |
| V1.0.0.0 | First available version | Axxium V3.0 |

Introduction

The UCServerPlugin.dll may be used to report the phone number of an external caller to the ESTOS UCServer just before a call transfer to an agent is made.

Background:

In an telephone environment, where a software like Axxium gets incoming calls and transfers them to agents or telephone extensions, the phone number of an external caller is normally not reported to the CTI software on the workstation. During the call transfer, the CTI software on a workstation shows the internal phone number of Axxium and not the external phone number of the caller.

Using the UCServerPlugin function AnnounceCallTransfer, the UCServer gets the number of the external caller, just before the call gets transferred to the extension. Therefore, the CTI Software on the workstation will now show the right number of the external caller.

The UCServerPlugin.dll may be used to query the telephony status of a line device. You may check if a line has active calls or is idle.

The UCServerPlugin.dll enables you to provide CallData from the IVR System to the UCServer environment. Information which has been fetched during the IVR process can be easily added to the call and used afterwards.

Important: To use the UCServerPlugin.dll you must copy the **UCServerPlugin.dll** and the **enetivr3.dll** in the Plugin Directory of Axxium.

Functions

AnnounceCallTransfer

Description

The Function AnnounceCallTransfer tells the UCServer the number of the external caller just before the call transfer starts.. You should enter this function (as a external dll module) just before you enter the transfer call box.

Input parameters

AgentExtension

The Agentextension is the phone number of the destination, where the call will be transferred to. When using Agentel, you should use "Agent" as Parameter.

ExternalCaller

The ExternalCaller property should be filled with the CallerID of the external caller.

TransferringNumber (otional)

The number of the IVR which will transfer the call to the agent.

Output Parameters

AnnounceCallTransfer does not use any Output parameters

Return

| Value | Condition | Information |
|-------|-----------|--|
| 0 | Success | Everything was ok |
| 1000 | Fail | Failed to load the enetivr3.dll |
| -1 | Fail | Connect to UCServer failed |
| -2 | Fail | Protocol Error with the UCServer |
| -22 | Partial | Everything was OK, but the destination extension was not found by the UCServer |
| -28 | Fail | Login to the UCServer failed. |

Additional information

The dll connects to the UCServer when loaded into memory. If the IP Connection to the UCServer dropps, it will be automatically reestablished.

SnapShotDevice

Description

The Function SnapShotDevice asks the UCServer if an active call exists on a given line extension. You may check if a telephone is idle before you start to transfer a call.

Input parameters

PhoneNumber

The PhoneNumber is the internal phone number of the device you want to get the status from. When using Agentel, you should use "Agent" as Parameter.

Output Parameters

HasActiveCalls

The parameter HasActiveCalls contains either 0 or 1. If the line extension is not known or the line does not have any active calls the result is 0. If the line device is known and has any active calls the result is 1.

Return

| Value | Condition | Information |
|-------|-----------|--|
| 0 | Success | Everything was ok |
| 1000 | Fail | Failed to load the enetivr3.dll |
| -1 | Fail | Connect to UCServer failed |
| -2 | Fail | Protocol Error with the UCServer |
| -22 | Partial | Everything was OK, but the destination extension was not found by the UCServer |
| -28 | Fail | Login to the UCServer failed. |

Additional information

The dll connects to the UCServer when loaded into memory. If the IP Connection to the UCServer dropps, it will be automatically reestablished.

SetCallData

Description

The Function SetCallData adds custom call data to a call within the UCServer environment. The call data can be sent prior to the existence of the call in the UCServer. If the call is not yet known on the UCServer the server will cache the information for a configurable time and add it to the call as soon as it appears. SetCallData allows you to set a string containing all name:value associations, SetCallDataEx offers you to set name and value separately.

Input parameters

AgentExtension

The Agentextension is the phone number of the destination, where the call will be transferred to. When using Agentel, you should use "Agent" as Parameter.

CallData

Call Data which will be added to the call. CallData is a list of key-value pairs in the following notation: Key1|value1:Key2|Value2 and so on. The property value string must not exceed 1270 characters in total. Alternatively SetCallDataEx allows to set propertyname and value in separated fields.

CallStateMask (otional)

A LINECALLSTATE_ Mask as filter . CallData will only be applied if the state mask matches the callstate on the UCServer.

| | |
|----------------------------------|------------|
| LINECALLSTATE_IDLE | 0x00000001 |
| LINECALLSTATE_OFFERING | 0x00000002 |
| LINECALLSTATE_ACCEPTED | 0x00000004 |
| LINECALLSTATE_DIALTONE | 0x00000008 |
| LINECALLSTATE_DIALING | 0x00000010 |
| LINECALLSTATE_RINGBACK | 0x00000020 |
| LINECALLSTATE_BUSY | 0x00000040 |
| LINECALLSTATE_SPECIALINFO | 0x00000080 |
| LINECALLSTATE_CONNECTED | 0x00000100 |
| LINECALLSTATE_PROCEEDING | 0x00000200 |
| LINECALLSTATE_ONHOLD | 0x00000400 |
| LINECALLSTATE_CONFERENCED | 0x00000800 |
| LINECALLSTATE_ONHOLDPENDCONF | 0x00001000 |
| LINECALLSTATE_ONHOLDPENDTRANSFER | 0x00002000 |
| LINECALLSTATE_DISCONNECTED | 0x00004000 |

Default is 0xffffffff matching any call state

HostCallID (otional)

TAPI driver host call ID. This id must match on the UCServer if set. Default is 0x00 matching any HostCallID.

TransferringNumber (otional)

The number of the IVR which will transfer the call to the agent.

Output Parameters

SetCallData does not use any Output parameters

Return

| Value | Condition | Information |
|-------|-----------|-------------|
|-------|-----------|-------------|

| | | |
|------|---------|--|
| 0 | Success | Everything was ok |
| 1000 | Fail | Failed to load the enetivr3.dll |
| -1 | Fail | Connect to UCServer failed |
| -2 | Fail | Protocol Error with the UCServer |
| -22 | Partial | Everything was OK, but the destination extension was not found by the UCServer |
| -28 | Fail | Login to the UCServer failed. |

Additional information

The dll connects to the UCServer when loaded into memory. If the IP Connection to the UCServer dropps, it will be automatically reestablished.

Data can be shown on the client side by editing the remotecontact.xslt. Simply uncommend the the section below <!-- Accessing custom call data example -->, change the name of the property according to the name used while setting the value.

SetCallDataEx

Description

The Function SetCallDataEx adds custom call data to a call within the UCServer environment. The call data can be sent prior to the existence of the call in the UCServer. If the call is not yet known on the UCServer the server will cache the information for a configurable time and add it to the call as soon as it appears. Where SetCallData allows you to set a string containing all name:value associations, this function offers you to set name and value separately. The method allows to set up to 5 properties within one function call. If you need to set more properties call the function multiple times.

Input parameters

AgentExtension

The Agentextension is the phone number of the destination, where the call will be transferred to. When using Agentel, you should use "Agent" as Parameter.

CallData[X]Name

Name of the property the CallData[X]Value will be available within the UCServer environment.

CallData[X]Value

Value of the property associated with CallData[X]Name.

CallStateMask (otional)

A LINECALLSTATE_ Mask as filter . CallData will only be applied if the state mask matches the callstate on the UCServer.

| | |
|----------------------------------|------------|
| LINECALLSTATE_IDLE | 0x00000001 |
| LINECALLSTATE_OFFERING | 0x00000002 |
| LINECALLSTATE_ACCEPTED | 0x00000004 |
| LINECALLSTATE_DIALTONE | 0x00000008 |
| LINECALLSTATE_DIALING | 0x00000010 |
| LINECALLSTATE_RINGBACK | 0x00000020 |
| LINECALLSTATE_BUSY | 0x00000040 |
| LINECALLSTATE_SPECIALINFO | 0x00000080 |
| LINECALLSTATE_CONNECTED | 0x00000100 |
| LINECALLSTATE_PROCEEDING | 0x00000200 |
| LINECALLSTATE_ONHOLD | 0x00000400 |
| LINECALLSTATE_CONFERENCED | 0x00000800 |
| LINECALLSTATE_ONHOLDPENDCONF | 0x00001000 |
| LINECALLSTATE_ONHOLDPENDTRANSFER | 0x00002000 |
| LINECALLSTATE_DISCONNECTED | 0x00004000 |

Default is 0xffffffff matching any call state

HostCallID (otional)

TAPI driver host call ID. This id must match on the UCServer if set.

Default is 0x00 matching any HostCallID.

TransferringNumber (otional)

The number of the IVR which will transfer the call to the agent.

Output Parameters

SetCallData does not use any Output parameters

Return

| Value | Condition | Information |
|-------|-----------|--|
| 0 | Success | Everything was ok |
| 1000 | Fail | Failed to load the enetivr3.dll |
| -1 | Fail | Connect to UCServer failed |
| -2 | Fail | Protocol Error with the UCServer |
| -3 | Fail | Parameter invalid (missing value for name or no parameter at all) |
| -22 | Partial | Everything was OK, but the destination extension was not found by the UCServer |
| -28 | Fail | Login to the UCServer failed. |

Additional information

The dll connects to the UCServer when loaded into memory. If the IP Connection to the UCServer dropps, it will be automatically reestablished.

Data can be shown on the client side by editing the remotecontact.xslt. Simply uncommmend the the section below <!-- Accessing custom call data example -->, change the name of the property according to the name used while setting the value.

Configuration

Registry

The following registry keys, located under "HKEY_LOCAL_MACHINE\Software\ESTOS\UCServer4\Client" are read from ENetIVR.

| Name | Value | Description |
|------------------------------|-----------|---|
| server | REG_SZ | The servers name or IP address. This setting is used by all CtiServer Client Applications. |
| CtiPort | REG_DWORD | The servers connector port. This setting is used by all CtiServer Client Applications. |
| enetivrdebug | REG_DWORD | The debug level. A value greater 0 enables logging into Enetivr3.log. |
| enetivrrepeat | REG_DWORD | A value greater than 0 invokes a timer for calling a keep-alive every <i>enetivrrepeat</i> seconds. If this key is missing the interval is set to 15 seconds by default. |
| enetivrakzremove | REG_SZ | The items in this column separated string will be removed if preceeding the external number before it is send to the TAPI server. If the external phone number comes with a preceeding 0 from the S0-bus a "0" must be written here. |
| enetivrakzprefix | REG_SZ | Optional. The string will be appended as prefix to the external number. It will be put in front of the number after the enetivrakzremove has been processed. |
| enetivrCalledRemove | REG_SZ | This string if persent will be added as prefix to the strCalledNumber in AnnounceCallTransfer. It is neccessary, if the line phone numbers in the CtiServer are configured as long (canonical) number and the AnnounceCallTransfer is called with internal (short) phone numbers. |
| enetivrCalledPrefix | REG_SZ | Optional. The string will be appended as prefix to the called number. It will be put in front of the called number after the enetivrCalledRemove has been processed. |
| enetivrSystemLogin | REG_SZ | The System Login Name. The Login required for the functionality of the interface. The System login is required only if it is configured in the CtiServer. |
| enetivrSystemPassword | REG_SZ | The System Login Password. The Login required for the functionality of the interface. The System login is required only if it is configured in the CtiServer. |

Ini File

Ini file settings are not used by the dll.

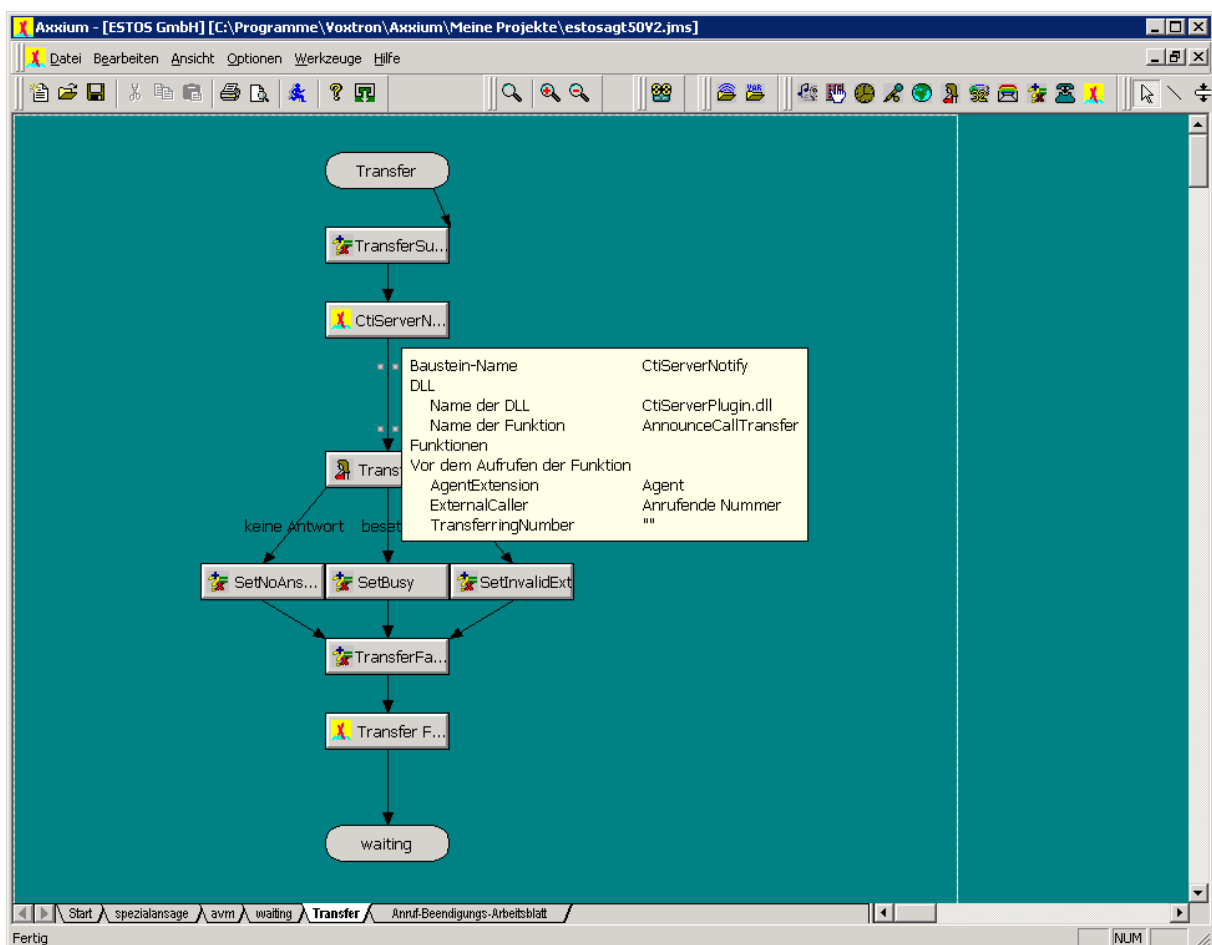
Examples

Example 1 : Incoming Callcenter with agents

Purpose

The Callcenter takes incoming calls, plays a welcome message and tries to find the next free agent. It will then report the external callerid to the CtiServer using the dll. Afterwards it transfers the call to the agent.

How it works



Externe Routine [?] [X]

Baustein-Name:

DLL | Funktionen

Name der DLL :

Name der Funktion:

Externe Routine [?] [X]

Baustein-Name:

DLL | Funktionen

☒ Setze vor das Aufrufen der Funktion ☐ Bekommen nach Anruffunktion

| Eingabe der Parameter | mit |
|-----------------------|--------------|
| AgentExtension | Agent |
| ExternalCaller | Anrufende... |
| TransferringNumber | ... |

| Variable | Funktion |
|----------|----------|
|----------|----------|

Example 2 : Incoming Call will be transferred if a extension is idle

Purpose

Axxium gets incoming calls, plays a welcome message and transfers the call to the next free extension. It asks the CtiServer if an extension is idle before transferring the call.

How it works

